

23 November, 2011

Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

#### Consultation Paper – National Electricity Amendment (Distribution Network Planning and Expansion Framework) Rule 2011

Dear Commissioners Pierce, Henderson, Spalding:

EnerNOC thanks the AEMC for the opportunity to contribute to a review of the National Electricity Amendment (Distribution Network Planning and Expansion Framework) Rule 2011 Consultation Paper.

As EnerNOC explains in the enclosed answers to the questions contained in the Consultation Paper, we subscribe to the notions that transparency is the most effective form of regulation and that bounded rationality will skew economically rational outcomes, hence this Rule change should be well supported by non-network solution providers.

DNSPs build capacity to meet ever increasing peak demand but what is often less appreciated is the flow on effect of that increased peak demand and network capacity. Unabated, peak demand will continue to rise at about 2.5% per annum<sup>1</sup> and TNSPs must build more capacity at their level to meet the forecast in peak demand and eventually more generation capacity must follow. Encouraging DNSPs to limit peak demand growth as this Rule change seeks to do will help ameliorate that effect and the factor cost resulting from the demand management should eventually reflect lower electricity retail prices from an improved load factor with increased flexibility (to manage short term peaks in demand).

Customers can be empowered to actively participate by providing non-network solutions and draw added value from this participation<sup>2</sup>. This value can be a substantial advantage to Australian companies that compete on the global stage. Particularly as electricity prices are set to increase substantially for a variety of reasons<sup>3</sup> but the sharpest increases are expected from network costs (network costs constitute up to 50% of the retail electricity cost and are due to increase by 35% in 2012/13<sup>4</sup>). EnerNOC estimates that by extrapolating these combined factors we could see retail electricity prices increase two or three fold within the next 5 years.

While electricity price increases have been well documented in various journals, and most notably network costs have borne the brunt of the blame, the consumer will not be prepared for the massive increases to come. More importantly the consumer in the NEM has not been educated to expect that they can actively participate in the electricity market such that they can directly benefit while adding upstream value to the

<sup>&</sup>lt;sup>1</sup> 2011 Electricity Statement of Opportunities; Maximum demand growth averaged across the NEM is expected to increase by 2.6% in summer and 2.4% in winter

<sup>&</sup>lt;sup>2</sup> Brattle Group, "The Power of Five Percent," 16 May 2007

http://www.dpc.nsw.gov.au/\_\_data/assets/pdf\_file/0005/118904/NSW\_Electricity\_Network\_and\_Prices\_Inquiry\_Report.pdf

<sup>&</sup>lt;sup>4</sup> Source: Chris Dunstan, UTS; Derived from Independent Pricing and Regulatory Tribunal, *Review of regulated retail tariffs and charges for electricity 2010-2013* (Final Report, March 2010)

NEM. Since customers continue to believe that they are price takers only, then it is reasonable to assume that market participants will continue to have market power.

EnerNOC believes that if this Rule change, as well as other MCE/AEMC initiatives, can be appropriately targeted to achieve greater participation from consumers which should lead to more competition resulting in less reliance on regulation, lower electricity prices and more/improved service offerings. As a commercial representative of four thousand consumers around the world who participate in 11,000MW of DR programs, EnerNOC looks forward to seeing many more opportunities for non-network solutions in the NEM.

Thank you again for the opportunity to comment on the Consultation Paper. Please do not hesitate to contact me directly with any questions related to this submission.

Regards,

Michael Zammit

Principal, Market Development

## 1.1 What are the implications of allowing each jurisdiction to determine the start date for the annual planning period?

While the majority of projects are usually confined to the one jurisdiction it is possible to see projects across interconnectors. For this reason and to further harmonise the regulatory environment across the NEM, EnerNOC would prefer to see a single start date for the annual planning period.

#### 1.2 Is it necessary to include a default start date for the annual planning period in the Rules?

Network projects often involve more than one network business. If planning periods are synchronised, particularly to a default start date, reconciling requirements will be far easier and will streamline solution development.

2.1 To what extent would potential investors, non-network providers and any other interested parties find the information provided by the proposed Demand Side Engagement Strategy (specifically, the Demand Side Engagement document, the database of non-network proposals/case studies and the Demand Side Engagement register) useful?

EnerNOC subscribes to the notion that transparency is the most effective form of regulation and that in its absence bounded rationality will skew optimal economic outcomes.

Non-network solutions can be Demand Response (DR) programs, or an embedded/distributed generation, or embedded/distributed storage, or energy efficiency programs or any combination of these four. The information requirements for each of these can be quite different but the transparency provided by this proposed Rule change should be useful to all forms of non-network solution.

However, all that information is of little value if the NSP is not cooperative. For example the NSP may need to provide a letter of support outlining the importance of the project to the security of the local network and work with the non-network proponent to identify and solicit customers on to the project. Some customers will need verification that these are emergency programs so as to meet EPA regulations and/or contractual commitments with tenants.

EnerNOC believes that DNSPs would be more cooperative if they had either targets such as 10% of their capex that must be displaced by non-network alternatives or mandated (as is the case in US state of California under the "Loading Order"<sup>5</sup>) to consider non-network alternatives and renewable energy sources before they can consider investment options.

The AEMC could also consider the appropriateness of so-called decoupling provisions as noted as part of the same Loading Order, under which the direct relationship between kWh sold and a utility's income is separated. While typically employed with vertically integrated utilities in California, under this scheme Networks would earn a rate of return from their non-network/DR solutions which effectively equalises the value of all investment types.

Of particular value is the proposed requirement for DNSPs to provide a process for the logging of embedded generation connection application. Greater clarity via a prescribed process has long been lacking in this area and this should drive greater efficiencies through a more objective registration process.

# 2.2 To what extent would DNSPs incur additional costs in developing and maintaining the various components of the proposed Demand Side Engagement Strategy?

<sup>&</sup>lt;sup>5</sup> http://www.energy.ca.gov/2005publications/CEC-400-2005-043/CEC-400-2005-043.PDF

The development and implementation of a Demand Side Engagement Strategy will involve costs for the NSPs because other than two or three NSPs in the NEM most are not very active in non-network solutions and therefore unlikely to have considered developing such a strategy. However, EnerNOC believes that this proposed Rule change as a whole will invigorate the procurement of non-network solutions and hence drive greater use of non-network alternatives. Therefore management and administration costs associated with non-network solutions will be incurred but the efficiencies through their use should provide overall savings.

# 3.1 What are the implications (positive and negative) of providing DNSPs with the opportunity to apply for exemptions or variations to the annual reporting requirements?

EnerNOC agrees that there should be some flexibility in the reporting requirements particularly where the benefits may be limited. However, economic analysis of non-network alternatives should capture all possible market benefits and it is difficult to see how, when transmission and generation savings are taken into account, there could be any major projects which wouldn't maximise the economic benefit by applying non-network alternatives wholly or partially to the solution.

Further, Networks in the past judged non-network solutions based on whether these options could fully replace an infrastructure option and as single solutions. The reality is that non-network solutions are far more flexible than their infrastructure counterparts such that a delay of only (say) 6 months of a major infrastructure investment could possible capture net economic benefits, or a non-network solution coupled with a scaled down infrastructure project may better maximise net economic benefit. In these cases DNSPs need to be more flexible and rewarded such that the benefits to them are equivalent to (or better than) those benefits they would earn from the single investment project on its own.

Indeed with 9.8% of maximum demand occurring for 40 hours or less per annum in the NEM<sup>6</sup>, it seems reasonable to assume that all major projects should have an investment component that will apply for 90% or the project and a non-network solution to meet the last 40 hours. This hybrid approach will capture far more market benefits and better meet the NEO for improved efficiency.

Following this line of thinking it seems unlikely that any major project that is well planned and taken through its due process would need an exemption or variation.

# 3.2 Do you consider the proposed process for applying for and granting an exemption or variation to the annual reporting requirements is appropriate?

The proposed process is uncomplicated and leaves the onus on the AER to consider whether an exemption is appropriate. EnerNOC believes it is right to position the AER in this role.

3.3 How might a DNSP demonstrate, and the AER determine, whether the costs of preparing certain reporting data would "manifestly exceed any benefit that may reasonably be obtained from reporting the relevant data in a national regime"? Is there a need to define a set of criteria to assist both parties in this assessment?

Setting the criteria will crystallise expectations on the DNSPs, so indicatively that would be a good starting point.

3.4 Are there any alternative solutions which may better balance the benefits of maintaining consistency across the NEM with the costs of preparing and reporting the data under a national framework?

EnerNOC has no comment in response to this question.

<sup>&</sup>lt;sup>6</sup> AEMO data to 31 May, 2011

### 3.5 Do DNSPs face sufficient business and regulatory drivers to ensure that they carry out appropriate planning and produce accurate forecasts in their DAPRs?

EnerNOC believes that the proposed Rule change will improve the forecasts in DAPRs, however it is difficult to verify this until the new Rules are implemented.

# 3.6 Is there a need to consider additional measures to ensure DNSPs deliver robust, high quality DAPRs? If so, what additional measures could be put in place?

EnerNOC believes that we should not prescribe the format of a DAPR, however competitive forces between DNSPs should encourage innovation. Effectively the success of that competition will be measured by the level of funding approved for non-network alternatives, and the dollars and MWs of capex investment that are displaced. Ideally EnerNOC believes that about 10% of capex would be more efficiently spent on non-network solutions (because about 10% of capex is spent on assets that are required for less than 0.5% of the time).

# 4.1 Do you consider the proposed Rule is appropriate and sufficient in clarifying the arrangements for joint planning between DNSPs and TNSPs?

Yes it is well specified in the proposed Rule change. This will be further enhanced by setting a default start date.

#### 4.2 In what circumstances would DNSPs be required to undertake joint planning with other DNSPs?

Most logically where the electricity transmission network is shared by multiple DNSPs or where there are joint network investments to be made. However there may be other areas that DNSPs should be encouraged to undertake joint planning, for example where DNSPs synergistically work together to trial non-network technologies to better understand their benefits, or where the outcome of research by multiple DNSPs is intended to be shared for their combined benefit.

# 4.3 Do you consider the proposed Rule is appropriate and sufficient in clarifying the arrangements for joint planning between DNSPs?

EnerNOC believes the proposed Rule change will further formalise the joint planning process. The application of the RIT-T to the joint investments should then promote the consideration of non-network alternatives.

# 5.1 Do you consider the proposed RIT-D design parameters are likely to work together to provide an effective decision making framework for DNSPs, consistent with the NEO?

EnerNOC is encouraged by the proposed RIT-D design parameters and remains optimistic that they will work to provide a more effective decision making framework for DNSPs.

In respect to whether the design parameters are consistent with the NEO, we hold that the NEO does not discriminate the level at which efficient and effective decisions are made. Clearly, a move that promotes more non-network solutions could have a poor economic outcome at the distribution level but a significant and long lasting benefit at other levels of the market or to the market overall.

Accepting market benefits that are upstream and downstream of the DNSP will better achieve the NEO by recognising the overall efficient contribution of non-network solutions.

5.2 Do you consider it is necessary to provide the AER with additional powers to (1) review a DNSPs policies and procedures with regard to the consideration of non-network alternatives and (2) audit projects which have been identified by DNSPs as not meeting the threshold for the RIT-D?

Yes we believe the additional powers to review policies/procedures and audit projects are justified.

5.3 Should the AER be required to publish a separate annual report detailing the results of any audit undertaken in the preceding 12 months?

Yes the AER should publish this report as it will provide valuable insight into this process.

6.1 Do you consider the proposed scope of parties who could raise a dispute to be appropriate?

Yes EnerNOC believes the scope of parties who could raise a dispute is most appropriate.

6.2 What are the implications (positive and negative) of allowing the AER to grant exemptions from the proposed dispute resolution process?

The AER should be allowed to grant exemptions on the grounds identified in the Consultation Paper.

EnerNOC has only one concern in this matter in that a DNSP may apply to the AER via the RIT-D for an investment. Subsequently, on review the investment application is rejected as the AER may believe non-network options may be viable. The DNSP subsequently does not pursue any remedial action and effectively delays further reporting until such time as the matter becomes urgent and the AER grants an exemption on basis of this urgency.

6.3 Is there a need to develop detail or specification around the process for applying to the AER for, and the AER approving, exemptions to the dispute resolution process?

EnerNOC has no comment in response to this question.

7.1 Are there any issues in respect of the rolling back of jurisdictional requirements that may need to be supported or provided for by transitional provisions in the Rules?

EnerNOC has no comment in response to this question.

7.2 If the proposed national framework was to be introduced, are the proposed timeframes appropriate to allow for the transition to the national framework?

EnerNOC has no comment in response to this question.

7.3 Are there any other factors that should be taken into account in developing transitional provisions to enable the efficient potential application of the proposed Rule to all DNSPs?

EnerNOC has no comment in response to this question.

7.4 From a market participant perspective, are there any implications in not aligning the proposed introduction of the national framework with the commencement of the NECF?

EnerNOC has no comment in response to this question.